

Jason Hyrum Steffen

Fermilab Center for Particle Astrophysics

Mail: MS 127, PO Box 500
Batavia, IL 60510

Phone: 630-840-6370
Email: jsteffen@fnal.gov

Citizenship: United States of America

Education

2006: Doctor of Philosophy in Physics
University of Washington, Seattle, Washington
Dissertation: *Detecting New Planets in Transiting Systems*

2003: Master of Science in Physics
University of Washington, Seattle, Washington

2000: Bachelor of Science in Physics and in Mathematics, *Summa Cum Laude*
Weber State University, Ogden, Utah

Research Interests

Cosmology, Dark Energy, Dark Matter, Extrasolar Planets, Gravitation

Scientific Employment

2006–Present: Brinson Postdoctoral Fellow, Fermilab Center for Particle Astrophysics
2001–2006: Research Assistant, University of Washington, Seattle
1999: National Science Foundation REU Intern, Inst. for Nuclear Theory, Seattle, WA
1998–2000: Research Assistant, Weber State University

Recent Grants

2009 – GammeV–CHASE (Fermilab Project T-991), PI.
2008–2011 – Kepler Participating Scientist, PI.
2007 – Spitzer Space Telescope Cycle 4, Co-I.

Selected Publications

- Borucki, B., *et. al.*, “Kepler Planet Detection Mission: Introduction and First Results”, *Science*, Accepted (2009)
- Chou, A.S., Wester, W., Baumbaugh, A., Gustafson, H.R., Irizarry-Valle, Y., Mazur, P.O., **Steffen, J.H.**, Tomlin, R., Upadhye, A., Weltman, A., Yang, X., Yoo, J., “Search for chameleon particles using a photon regeneration technique”, *Phys. Rev. Lett.*, 102, 030402, (2009), arXiv:0806.2438.
- Steffen, J.H.**, “Optimal boarding method for airline passengers”, *JATM*, 14 (3), 146-150 (2008), arXiv:0802.0733.
- Chou, A.S., Wester, W., Baumbaugh, A., Gustafson, H.R., Irizarry-Valle, Y., Mazur, P.O., **Steffen, J.H.**, Tomlin, R., Yang, X., Yoo, J., “Search for axion-like particles using a variable baseline photon regeneration technique”, *Phys. Rev. Lett.*, 100, 080402 (2008), arXiv:0710.3783.
- Steffen, J.H.** & Agol, E., “An analysis of the transit times of TrES-1b”, *MNRAS Letters*, Volume 364, Issue 1, p. 96 (2005), arXiv:astro-ph/0509656.
- Agol, E., **Steffen, J.**, Sari, R., & Clarkson, W., “On detecting terrestrial planets with the timing of giant planet transits”, *MNRAS*, Volume 359, Issue 2, pp. 567-579 (2005), arXiv:astro-ph/0412032.